METHOD AND APPARATUS FOR EFFECTIVELY ENABLING AN OUT OF SEQUENCE WRITE PROCESS WITHIN A NON-VOLATILE MEMORY SYSTEM

ABSTRACT

Methods and apparatus for enabling contents to be efficiently stored in physical blocks of a non-volatile memory are disclosed. According to one aspect of the present invention, a method for performing a write operation in a non-volatile memory system which has a memory unit includes writing a first set of contents into a first physical sub-unit of the memory unit and writing a second set of contents into a second physical sub-unit of the memory unit after the first set of contents is written into the first physical sub-unit. The first physical sub-unit is sequentially before the second physical sub-unit in the memory unit. The first set of contents is associated with a second logical sub-unit of a logical unit and the second set of contents is associated with a first logical sub-unit of the logical unit that is sequentially before the second logical sub-unit in the logical unit.